





IMPORTED SOIL TARGET CONCENTRATIONS - HUMAN HEALTH - July 2021

| | Assessment Criteria (Residential with homegrown produce) | Assessment Criteria (Allotment) | Assessment Criteria (POS _{RESI}) | Source |
|-----------------------------------|----------------------------------------------------------|---------------------------------------|--------------------------------------------------|--------------|
| Heavy Metals | | | | |
| Arsenic | 37.0 | 49.0 | 79.0 | C4SL |
| Beryllium | 1.7 | 35.0 | 2.2 | S4UL |
| Cadmium | 22.0 | 3.9 | 220.0 | C4SL |
| Chromium III | 910.0 | 18000.0 | 1500.0 | S4UL |
| Hexavalent chromium | 21.0 | 170.0 | 21.0 | C4SL |
| Lead*1 | 200.0 | 80.0 | 630.00 | C4SL |
| Mercury - inorganic | 40.0 | 19.0 | 120.0 | S4UL |
| Nickel | 180.0 | 230.0 | 230.0 | S4UL |
| Vanadium | 410.0 | 88.0 | 2000.0 | S4UL |
| Selenium | 250.0 | 91.0 | 1100.0 | S4UL |
| Phytotoxic Metals | | | | |
| Copper | 2400.0 | 520.0 | 12000.0 | S4UL |
| Zinc | 3700.0 | 620.0 | 81000 | S4UL |
| Boron | 290.0 | 45.0 | 21000.0 | S4UL |
| Organics | | | =:000.0 | 5.02 |
| Phenol | 280.0 | 66.0 | 760.0 | S4UL |
| PAHs | | 33.0 | . 55.0 | 5.52 |
| Naphthalene*3 | 2.3 | 4.1 | 4900.0 | S4UL |
| Acenaphthylene*3 | 170.0 | 28.0 | 15000.0 | S4UL |
| Acenaphthene*3 | 210.0 | 34.0 | 15000.0 | S4UL |
| Fluorene*3 | 170.0 | 27.0 | 9900.0 | S4UL |
| Phenanthrene*3 | 95.0 | 15.0 | 3100.0 | S4UL |
| Anthracene*3 | 2400.0 | 380.0 | 74000.0 | S4UL |
| Fluoranthene*3 | 280.0 | 52.0 | 3100.0 | S4UL |
| Pyrene*3 | 620.0 | 110.0 | 7400.0 | S4UL |
| Benz(a)anthracene*3 | 7.2 | 2.9 | 29.0 | S4UL |
| Chrysene*3 | 15.0 | 4.1 | 57.0 | S4UL |
| Benzo(b)fluoranthene*3 | 2.6 | 0.99 | 7.1 | S4UL |
| Benzo(k)fluoranthene*3 | 77.0 | 37.0 | 190.0 | S4UL |
| Benzo(a)pyrene*2 | 5.0 | 5.7 | 10 | C4SL |
| Indeno(123-cd) pyrene*3 | 27.0 | 9.5 | 82.0 | S4UL |
| Dibenz(ah)anthracene*3 | 0.24 | 0.14 | 0.57 | S4UL |
| Benzo(ghi)perylene*3 | 320.0 | 290 | 640.0 | S4UL |
| Fuel range hydrocarbons | 320.0 | 230 | 040.0 | OHOL |
| Benzene | 0.87 | 0.18 | 140.0 | C4SL |
| Toluene | 130.0 | 22.0 | 56000.0 | S4UL |
| Ethyl Benzene | 47.0 | 16.0 | 24000.0 | S4UL |
| Xylenes | 56.0 | 28.0 | 41000.0 | S4UL |
| Aromatic C5-C7 | 70.0 | 13.0 | 56000.0 | S4UL |
| Aromatic C7-C8 | 130.0 | 22.0 | 56000.0 | S4UL |
| Aromatic C7-C6 Aromatic C8-C10 | 34.0 | 9.0 | 5000.0 | S4UL |
| Aromatic C0-C10 Aromatic C10-C12 | 74.0 | 13.0 | 5100.0 | S4UL |
| Aromatic C12-C16 | 140.0 | 23.0 | 3800.0 | S4UL |
| Aromatic C12-C10 | 260.0 | 46.0 | 3800.0 | S4UL |
| Aromatic C10-C21 | 1100.0 | 370.0 | 3800.0 | S4UL |
| Aromatic C21-C35 Aromatic C35-C44 | 1100.0 | 370.0 | 3800.0 | S4UL |
| Aliphatic C5-C6 | 42.0 | 730.0 | 570000.0 | S4UL |
| Aliphatic C5-C6 | 100.0 | 2300.0 | 60000.0 | S4UL |
| Aliphatic C8-C10 | 27.0 | 320.0 | 1300.0 | S4UL |
| Aliphatic C10-C12 | 130.0 | 2200.0 | 1300.0 | S4UL |
| Aliphatic C12-C16 | 1100.0 | 11000.0 | 1300.0 | S4UL S4UL |
| | | 260000.0 | | |
| Aliphatic C16-C35 | 65000.0 | | 250000.0 | S4UL S4UL |
| Aliphatic C35-C44 | 65000.0 | 260000.0 | 250000.0 | 54UL |
| Inorganics | | lo significant detectio | | Various |

Notes: All values are mg/kg unless stated

C4SL – Category 4 Screening Level as produced by Defra –based on 6% SOM
S4UL – Suitable 4 Use Levels as produced by Land Quality Management – based on 1% SOM.
*1 – C4SL for lead based on the LLTC of 3.5µg/dL-1 and C4SL exposure changes.
*2 – BaP can be considered as a marker compound for consideration of other PAHs.
*3 – Threshold values may be discounted based upon use of BaP as a marker compound.



IMPORTED SOIL TARGET CONCENTRATIONS - PHYTOTOXIC - MAY 2015

| | Phytotoxic thresholds for plants | Source | |
|-------------------|----------------------------------------|------------------------------------------|--|
| Phytotoxic Metals | | | |
| Selenium | 10.0 | SGV9 Document | |
| Boron | 3.0 | ICRCL 59/83 | |
| Copper | 130.0 | | |
| Nickel | 70.0 | | |
| Zinc | 300.0 | | |
| Cadmium | 8.0 | Amended Dutch RIVM – Ecotoxilogical risk | |
| Chromium | 154.0 | | |
| Mercury | 28.0 | | |